

1 What is claimed is:

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3 1. A heat sink with a main body for accommodating at least one electronic  
4 structural element, and with a spring element for pressing the structural element  
5 against the main body, whereby the spring element is held on the main body by a  
6 connecting means,

7 wherein, the connecting means are configured as a push-on connection (15) and  
8 have a projection (7) on the main body (2) and a mounting opening (14) in the  
9 spring element (3) for the projection (7), whereby the opening edge (23) of the  
10 mounting opening (14) bears, at least in sections, against the lateral surface of  
11 the projection (7) under preload resulting from the intrinsic elasticity of the spring  
12 element (3) and/or the projection (7).

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14 2. The heat sink as recited in Claim 1,  
15 wherein the spring element (3) is designed as a leaf spring.

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17 3. The heat sink as recited in one of the preceding claims,  
18 wherein the spring element (3) has at least one contact point (13) for the  
19 structural element (5).

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21 4. The heat sink as recited in one of the preceding claims,  
22 wherein the spring element (3), in the state in which it is acting on the structural  
23 element (5), has an elastic deflection located between the mounting opening (14)  
24 and the contact point (13) for applying the preload.

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26 5. The heat sink as recited in one of the preceding claims,  
27 wherein the diameter (16) of the mounting opening (14) is greater than the  
28 associated diameter (17) of the projection (7).

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30 6. The heat sink as recited in one of the preceding claims,

1 wherein, before the spring element (3) is installed, the diameter (16) of the  
2 mounting opening (14)—at at least one point on the circumference of the  
3 mounting opening—is smaller than or equal in size to the diameter (17) of the  
4 projection (7) at a point of the projection circumference associated with said  
5 point.

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7 7. The heat sink as recited in one of the preceding claims,  
8 wherein the edge region (28) of the mounting opening (14) is provided with  
9 indentations (32) for forming spring tabs (31).

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11 8. The heat sink as recited in one of the preceding claims,  
12 wherein the contact zone on the projection (7) is a plastic material deformation  
13 zone.

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15 9. The heat sink as recited in one of the preceding claims,  
16 wherein the projection (7) and the main body (2) are an extruded part.

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18 10. The heat sink as recited in one of the preceding claims,  
19 wherein the projection (7) is designed as a circular cylindrical peg (33), and the  
20 mounting opening (14) has a circular cross section.

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